

12. ENVIRONMENTAL BASELINE SURVEYS

12.1 Introduction

In 1992, the Community Environmental Response Facilitation Act (CERFA) amended CERCLA to require Federal agencies and departments to identify property that does not contain contamination from the storage, release, or disposal of hazardous substances or petroleum products or their derivatives, prior to the termination of Federal activities. CERFA lists the sources of information that must be reviewed to determine if a property is uncontaminated.

Congress passed CERFA to facilitate the identification of real property offering the greatest opportunity for reuse and redevelopment at each facility where operations are terminating. Congress' goal was to mitigate the adverse economic effects of the reconfiguration and reduction in size of the Defense complex. The CERFA amendments to CERCLA are located in CERCLA Sections 120(h)(3) to 120(h)(5).

Department of Defense elements (the Departments of the Army, Navy and Air Force) have developed standard methodologies for fulfilling these CERCLA requirements and for deciding on the suitability of military bases (or portions of bases) for transfer to other Federal government entities or for sale or lease. The foundation of this methodology is an environmental baseline survey (EBS). DOD elements regularly perform EBSs to support all real property transactions, including property acquisitions

Department of Defense requirements for the preparation of EBSs vary considerably by service. This chapter focuses on Navy EBS requirements. Air Force requirements are generally more specific and detailed, while Army requirements are generally less specific and detailed.

While the CERCLA requirements described above are applicable to DOE, there has been no guidance on how to prepare an EBS report to fulfill CERCLA requirements applicable to real property transfer. EBSs are defined and described below.

12.2 Definitions

DOD distinguishes between two types of EBSs. A **base-wide EBS** is designed to be a factual representation of the environmental conditions and to provide information on the environmental risks for all property within an installation. The environmental "baseline" of a base-wide EBS is blind to any specific or proposed real property transaction. As such, the base-wide EBS does not provide specific conclusions and recommendations on the future use of the property.

A base-wide EBS is also used to identify:

- Parcels of a base that may be determined to be uncontaminated within the meaning of CERCLA 120(h)(4); or
- Portions or parcels of a base that, although contaminated within the meaning of CERCLA 120(h)(4), are in such condition that DOD may issue deeds on the basis that "all remedial action necessary to protect human health and the environment has been taken."

A **site-specific EBS** is designed to address data gaps in a base-wide EBS regarding a specific parcel of land. It is usually performed when a specific parcel of land is being considered for transfer. While a base-wide EBS is blind to any specific or proposed real property transaction, the purpose of performing a site-specific EBS is usually related to a proposed property transaction or reuse option.

12.3 Purposes/Advantages of an EBS

The purpose of performing an EBS is to document the environmental condition of a property. Such documentation can be used for a number of different purposes, including:

- Provide a basis for determining if property is suitable for transfer, lease, or assignment;
- Serve as a foundation study for installation closure;

- Satisfy legal requirements including:
 - Notification requirements under Sections 120(h)(1) and (3) of CERCLA,
 - Uncontaminated parcel identification requirements of Section 120(h)(4) of CERCLA, and
 - State or local real property transfer requirements.

DOD elements have developed guidance specifying standard methodologies and formats for EBSs. The purpose of using standard formats and methodologies is to enable policymakers to evaluate or categorize properties in relation to each other.

12.4 EBS Process

The EBS process is based on the requirements of CERCLA Sections 120(h)(1) "Notice," 120(h)(3), "Contents of Certain Deeds," and 120(h)(4), "Identification of Uncontaminated Property." As mentioned in Chapter 6, these requirements identify sources of information that must be reviewed concerning the current and previous uses of the property. In general, the EBS process relies on three types of information sources: records review, site reconnaissance, and interviews.

Exhibit 12-1 compares the legislative language of CERCLA 120(h)(3) and 120(h)(4)(A) with Navy guidance interpreting this language and describing the EBS process. As shown on the exhibit, the Navy has added requirements beyond the legislative language. Most of the additional requirements specify which sources of information must be reviewed to satisfy the notification requirements of CERCLA Sections 120(h)(1) and 120(h)(3) and the uncontaminated parcel identification requirements of Section 120(h)(4).

Once the EBS is completed, there may be areas that remain unevaluated or require additional evaluation. Under these circumstances, DOD may perform a Phase II EBS. A Phase II EBS focuses on field investigations, sampling and analysis (including data validation), and risk assessment.

12.5 EBS Presentation/Documentation

It is customary to present the data in the EBS document in a concise form, using matrices, tables, figures, and maps wherever possible. Navy guidance on performing an EBS specifies a format for EBS presentation. Exhibit 12-2 presents this format and describes the contents of each EBS section.

The choice of an organizational format for the EBS for your property depends on the types of environmental information. Your EBS organizational format does not have to follow the same format as exemplified in Exhibit 12-2. For example, most DOE facilities do not have housing, unlike military bases; therefore, a chapter on lead paint in housing may not be relevant and may be omitted. On the other hand, unexploded ordnance may be present and should be discussed. Nonetheless, all of the information that you gathered on the basis of Chapters 2-11 should be presented. If there are no floodplains or wetlands on the property, it is sufficient to make a statement to that effect. Note that no section is devoted to environmental permits. You may either choose to add a section devoted to environmental permits or to discuss environmental permits in the separate sections to which they are relevant. For example, you may discuss Clean Air Act permits in the "Air" section and UST permits in the "Storage Tanks and Pipelines" section.

Different services use different property categorization schemes. The Navy categorization scheme, which is comprised of seven categories, is presented in Exhibit 12-3. The Navy would generally perform a Phase II EBS to be able to move properties from Category 7 (unevaluated areas) to one of the first four categories.

The Army property categorization scheme is comprised of three categories. It is presented in Exhibit 12-4 for comparison.

Exhibit 12-1. Comparison of CERCLA § 120 Information Requirements and Navy Guidance on Fulfilling These Requirements

Type of Requirement	CERCLA Language/Citation	Navy Guidance
Obtain information on hazardous substances to place in deeds	<p>For each property on which any hazardous substance was stored for one year or more, known to have been released, or disposed of, each deed shall contain (to the extent that such information is available on the basis of a complete search of agency files): notice of the type and quantity of such hazardous substances; notice of the time at which such storage, release, or disposal took place; and a description of the remedial action taken if any.</p> <p>CERCLA 120(h)(3)(A)</p>	<p>Identify all hazardous substances/petroleum products stored for one year or more, released, or disposed of on subject property. List actual or approximate types and quantities and the time or times when storage, release into the environment or structures, or disposal of hazardous substances/petroleum products occurred on the property, to such extent that information is available.</p> <p>Consider existing data on contaminants in air, soil, ground and surface water, soil gas and vapor, leachate, sludge, and sediment.</p> <p>The records search requirements listed in all of the boxes below specify which records should be searched to obtain information on hazardous substances/petroleum products and on remedial action taken.</p>
Search government records for information on contamination	<p>Perform a detailed search of Federal government records pertaining to the property.</p> <p>CERCLA 120(h)(4)(A)(i)</p>	<p>Review base surveys regarding asbestos, PCBs, lead, radon, USTs and piping systems, SWMUs, air pollution inventories, environmental compliance audits, and bioenvironmental engineering and annual industrial hygiene surveys as well as environmental engineering workplace surveys.</p> <p>Review all remediation/restoration studies, or other documentation produced in accordance with procedures being carried out at the property under CERCLA or the Solid Waste Disposal Act.</p> <p>Review any applicable Federal, State, or local agency reports; notices of violation or noncompliance; corrective action agreements; compliance orders; RCRA Facility Assessments; or other similar records.</p> <p>Review reasonably obtainable State and local governmental records that reflect the prior uses of the base.</p> <p>Review permits pertaining to an environmentally regulated activity (e.g., air quality permits, NPDES permits, RCRA Part B permits).</p> <p>Consider existing data on contaminants in air, soil, ground and surface water, soil gas and vapor, leachate, sludge, and sediment.</p>

Exhibit 12-1. Comparison of CERCLA § 120 Information Requirements and Navy Guidance on Fulfilling These Requirements (Continued)

Type of Requirement	CERCLA Language/Citation	Navy Guidance
Search chain of title documents for information on contamination	Review recorded chain of title documents regarding the real property. CERCLA 120(h)(4)(A)(ii)	Review all recorded chain of title, deed, other real property records, utility systems, or other available documents to ascertain prior uses of the real property which may have involved hazardous substances or otherwise contaminated the property or created environmental or safety risks.
Review aerial photographs for information on prior uses of the property	Review aerial photographs that may reflect prior uses of the real property and that are reasonably obtainable. CERCLA 120(h)(4)(A)(iii)	Perform a review of reasonably obtainable photographs of the property.
Perform a visual inspection of the property to obtain information on possible contamination	Perform a visual inspection of the real property and any buildings, structures, equipment, pipe, pipeline, or other improvements on the real property, and a visual inspection of property immediately adjacent to the real property. CERCLA 120(h)(4)(A)(iv)	Perform visual and physical walk-through inspections of the real property and of immediately adjacent properties to include any buildings, structures, equipment, pipe, pipelines, or other improvements to determine or confirm the presence of environmentally hazardous conditions or concerns (unusual odors, stained soils, stressed vegetation, leachate seeps, or other indications of potential contamination or risky conditions from a safety standpoint.) Any such indications of concern discovered should be followed up and resolved within the scope of the effort involved. Complete and walk-through inspections shall be done on every part of the base during a base-wide EBS effort.
Perform a physical inspection of adjacent property to obtain information on possible contamination migration	Perform a physical inspection of property adjacent to the real property, to the extent permitted by owners or operators of such property. CERCLA 120(h)(4)(A)(v)	Perform a physical inspection of the property adjacent to the real property, to the extent permitted by owners and operators of such property. Adjacent properties are considered to be, but are not limited to, those that are contiguous to the subject property and normally within a quarter mile radius. The survey should be addressed to those portions of the properties relatively near the installation that could pose significant environmental concern and/or have significant impact on the results of the EBS.

Exhibit 12-1. Comparison of CERCLA § 120 Information Requirements and Navy Guidance on Fulfilling These Requirements (Continued)

Type of Requirement	CERCLA Language/Citation	Navy Guidance
Review records on adjacent property to obtain information on contamination	Review reasonably obtainable Federal, State, and local government records of each adjacent facility where there has been a release of any hazardous substance or any petroleum product or its derivatives, including aviation fuel and motor oil, on the real property. CERCLA 120(h)(4)(A)(vi)	Review all reasonably obtainable Federal, State, and local government records of each adjacent property where there has been a release of any hazardous substance or petroleum product or its derivatives, including aviation fuel and motor oil, and which is likely to cause or contribute to a release or threatened release of any hazardous substance or any petroleum product or its derivatives, including aviation fuel or motor oil, on subject real property. Review reasonably obtainable State and local governmental records that reflect the prior uses of adjacent real property.
Interview employees to obtain information on property uses, hazardous substances, etc.	Interview current or former employees involved in operations on the real property. CERCLA 120(h)(4)(A)(vii)	Interview current and/or former employees involved in operations on the real property. Interview Federal, State, and local regulators where appropriate.
Identify uncontaminated property based on sampling, if appropriate	Identification of uncontaminated property shall also be based on sampling, if appropriate CERCLA 120(h)(4)(A)(viii)	Navy guidance on the preparation of a base-wide EBS does not address when it is appropriate to perform new sampling.

Source: CERCLA Section 120 and Southdiv (Navy) Guidance on Conducting a Base Wide Environmental Baseline Survey (EBS), a Site-Specific EBS, and Format for EBS Report Preparation, April 7, 1994.

Exhibit 12-2. Base-Wide EBS Report Format

EBS Section and Title	Contents of the Section
Executive Summary	Describes the purpose of the EBS, its use, methodology, and a summary of its findings
1.0 Purpose of the EBS	Describes why the Navy must determine the environmental condition of the property
1.1 Boundaries of Property and Scope of Survey	Describes and defines the boundaries of the property including adjacent properties being considered in the EBS Includes a map of the area under consideration, the number and a general description of facilities, and information on the general use (e.g., administrative, industrial) of these facilities
2.0 Survey Methodology	Describes the methods used to obtain the information to document the environmental and safety condition of the property (This section is comprised of the information in the Navy Guidance column of Exhibit 12-1.)
2.1 Approach and Rationale	Describes the approach used to collect the information (e.g., standardized checklists, forms, procedures, inspections, etc.)
2.1.1 List and Description of Documents Reviewed	Provides a complete listing of documents reviewed including computerized files, photographs, and maps Documents are numbered and referred to in the text of the EBS by number
2.1.2 Inspections of Properties Conducted and Personnel Contacted	Lists the properties that received visual and physical walk-through site inspections, including adjacent properties, in a table Lists personnel who were interviewed about current and former operations Describes content of personnel interviews or provides text of standard interview questions
3.0 Summary of Data for On-Base Properties	Summarizes the records search and visual and physical walkthrough site inspections of the on-base properties. Properties are categorized as uncontaminated in accordance with the CERCLA 120(h)(4) requirements, or given one of six additional characterizations (see Exhibit 12-3)
3.1 History and Current Usage	Provides a synopsis of the history of the installation and the types and levels of industrial activities that have occurred on the property
3.2 Environmental Setting	Describes the overall environmental condition of the installation in terms of the number of remediation/restoration program sites, USTs, soils, air, water, and utilities, etc.
3.2.1 Stormwater Runoff Patterns	Discusses the general physical make-up of the installation supplemented by a map identifying major drainage patterns and stormwater conveyances

Exhibit 12-2. Base-Wide EBS Report Format (Continued)

EBS Section and Title	Contents of the Section
3.2.2 Hazardous Materials and Waste Management	<p>Identifies and documents the collection, storage, and disposal of all solid and hazardous wastes that were in existence on the installation.</p> <p>Compiles and catalogues the types, quantities, and times when storage, release, or disposal of hazardous waste took place on the property, to the extent that information is available</p> <p>Identifies the custodian and location of hazardous waste manifests processed for hazardous waste disposal</p>
3.2.3 CERCLA-Related Contamination (Installation Restoration Program)	<p>Summarizes the status of remediation/restoration program sites</p>
3.2.4 Storage Tanks and Pipelines	<p>Provides a detailed inventory and status of all aboveground and underground storage tanks and pipelines on the installation</p> <p>Includes a list identifying location, size, contents, and status of each tank and pipeline</p>
3.2.5 Wastewater Treatment and Disposal	<p>Describes the type and use of the wastewater collection system (including sewer lines) on the installation</p> <p>Includes location of treatment facilities, disposal methods, outfall locations, use of septic systems, etc.</p>
3.2.6 Lead in Drinking Water	<p>Discusses surveys and results for lead in drinking water</p>
3.2.7 Oil Water Separator	<p>Provides a detailed inventory of and historical account for all oil-water separators on the installation</p> <p>Contains a detailed list identifying location, size, contents and status</p>
3.2.8 Asbestos	<p>Discusses asbestos survey results and conditions and abatement work completed on the installation</p>
3.2.9 Air	<p>Discusses the status of the air monitoring program and identifies any air permits held by the installation</p>
3.2.10 Lead-Based Paint Surveys and Other Sources of Lead	<p>Discusses the results of lead-based paint surveys, other sources of lead contamination, and mitigation actions taken</p>

Exhibit 12-2. Base-Wide EBS Report Format (Continued)

EBS Section and Title	Contents of the Section
3.2.11 PCBs	Provides a detailed inventory of PCB-containing equipment Includes a list identifying location, size and status of, and sampling and analysis results for PCB-containing equipment
3.2.12 Pesticides	Identifies and documents storage and use of all pesticides that were in use on the installation Includes a list that compiles and catalogs the operation permits, types, quantities, and time when storage, release, or disposal of pesticides took place on the property, to the extent that information is available
3.2.13 Medical Waste	Identifies and documents storage of all medical wastes on the installation Includes a list that compiles and catalogs the types and quantities of medical waste, and the time when storage, release, or disposal of medical waste took place on the property, to the extent that information is available
3.2.14 Ordnance	Documents where ordnance was used, stored, or disposed of on the installation
3.2.15 Radioactive Materials and Wastes	Discusses the use, storage, and disposal of radioactive (ionizing and non-ionizing) materials on the installation
3.2.16 Radon	Discusses the results of any radon surveys conducted and mitigation actions taken
3.2.17 Groundwater	Discusses the aquifers and uses for groundwater and provides a summary of groundwater contamination
3.3 Natural and Cultural Resources	Documents any known historical structures or archeological sites, Native American concerns, and any natural resource considerations (wetlands, endangered species, etc.)
3.4 Identification of Uncontaminated Properties	Identifies "uncontaminated" properties, that is, properties where there is no known or suspected environmental contamination as defined by CERCLA 120(h)(4) These are Category 1 properties on Exhibit 12-3
3.5 All Other Properties	Identifies properties in Categories 2 through 7 (see Exhibit 12-3) Presents a summary of properties by category type and provides a justification for putting the property into a particular category Addresses CERCLA 120(h)(1) and (3) disclosure requirements Presents information used to document the basis for follow-on work, including site-specific EBS efforts

Exhibit 12-2. Base-Wide EBS Report Format (Continued)

EBS Section and Title	Contents of the Section
4.0 Summary of Data for Adjacent Properties	Summarizes the records search, visual site inspections, and physical inspections performed on off-site properties
4.1 History and Current Usage	Provides a synopsis of the use history of the adjacent property and the type and level of industrial and other activities, etc., that have occurred, based on records, visual inspections, physical examinations of piles and debris, and interviews
4.2 Environmental Setting	Provides an assessment of the overall environmental condition of the adjacent property, to the extent practicable
4.3 Adjacent Properties with No Known or Suspected Releases	Identifies adjacent properties where there has been no known release of any hazardous substances or any petroleum product or its derivatives, including aviation fuel and motor oil
4.4 Adjacent Properties with Known or Suspected Releases	Identifies adjacent properties where there has been a release or suspected release of any hazardous substance or a petroleum product or its derivatives, including aviation fuel and motor oil, that has threatened or is likely to threaten on-base property. To the extent practicable, documents the type, quantity, and extent of contamination, the time frame in which it occurred, and any corrective actions taken
5.0 Conclusions and Recommended Courses of Action	Summarizes environmental concerns raised throughout the EBS based on an evaluation of possible environmental risks If appropriate, concludes that a parcel (or parcels) is uncontaminated and ready for disposition after regulatory concurrence
5.1 Facility Matrix	Provides a summary of each building/facility in matrix format Summarizes information for each facility including: facility name/number, facility description, square footage, year constructed, and information on hazardous materials/wastes stored, asbestos, radon, lead-based paint, USTs, and above-ground storage tanks
5.2 Property Categorization	Provides a map of the installation showing the results of the EBS property characterization Property is categorized in accordance with the categorization scheme presented on Exhibit 12-3
5.3 Resource Map	Provides a map displaying data (e.g., UST locations, areas where hazardous materials were stored or used, monitoring wells) by facility and property location
6.0 Certification of EBS	Contains certification statements and signatures Lists individuals who performed and reviewed the survey materials and findings

Source: Southdiv (Navy) Guidance on Conducting a Base Wide Environmental Baseline Survey (EBS), a Site-Specific EBS, and Format for EBS Report Preparation, April 7, 1994.

Exhibit 12-3. Navy EBS Property Categorization Scheme

Property Category Definition	Color on Facility Map
1. Areas where no storage, release, or disposal of hazardous substances or petroleum products has occurred (including no migration of these substances from adjacent areas)	White
2. Areas where only storage of hazardous materials, hazardous substances, or petroleum products has occurred (but no release, disposal, or migration from adjacent areas has occurred)	Blue
3. Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, but at concentrations that do not require a removal or remedial action	Light Green
4. Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, and all remedial actions necessary to protect human health and the environment have been taken	Dark Green
5. Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, removal and/or remedial actions are under way, but all required remedial actions have not yet been taken	Yellow
6. Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, but required response actions have not yet been implemented	Red
7. Areas that are unevaluated or require additional evaluation	Gray

Source: Southdiv (Navy) Guidance on Conducting a Base Wide Environmental Baseline Survey (EBS), a Site-Specific EBS, and Format for EBS Report Preparation, April 7, 1994.

Exhibit 12-4. Army EBS Property Categorization Scheme

Category	Definition
Type I Property	Property where little potential exists for environmental contamination or disruption from past, present, or proposed activities. Typically, this includes sites in locations such as housing, administrative, or recreational areas where no hazardous materials were known to be stored or used. However, because of the potential for environmental contamination at these properties from such things as leaking underground storage tanks, few properties should be classified as Type I.
Type II Property	Property where some potential exists for environmental contamination or disruption from past, present, or proposed activities. This potential may be due to the past historical usage of the property or to its proximity to critical areas such as a wildlife habitat or a sole-source aquifer. When any doubt exists about a Type I property, it should be redesignated as a Type II property.
Type III Property	Property with known environmental contamination or disruption from past or present activities.

Source: Environmental Quality, Army Regulation 200-1, Appendix B, Environmental Baseline Survey (EBS) Protocol.

The choice of the property categorization scheme for your site depends on the level of detail of the information you have about the extent of the contamination. Choose the Navy categorization scheme if your information is sufficiently detailed to lend itself to distinguishing between seven levels. Otherwise, choose the Army categorization scheme. Alternatively, you may come up with your own categorization scheme provided that the scheme is justified by the types of parcels that exist on your site and are in accordance with prudent management policies and practices for land reuse.

12.6 EBS Conclusions

EBS conclusions are different for base-wide and site-specific EBSs. For a base-wide EBS, the conclusions focus on the:

- Location of offsite areas of environmental concern;
- Past hazardous substance/petroleum products practices;
- Current hazardous substance/petroleum products practices; and
- Environmental condition of the base as shown on the facility matrix and property categorization map.

If applicable, base-wide EBS conclusions also identify parcels that are "uncontaminated" based on the CERCLA 120(h)(4) definition. Base-wide EBS conclusions would also identify data gaps.

Site-specific EBS conclusions generally present:

- A decision regarding whether the parcel in question requires a notification to the lessee or transferee regarding hazardous substances on the parcel, and the recommended content of that notice;
- An evaluation of the suitability of the parcel for the intended purpose (e.g., lease, transfer, or sale);
- An evaluation of the suitability of the parcel for reuse; and

- A listing of any specific recommended restrictions on the use of the parcel.

12.7 Relationship to NEPA Documents

The EBS conclusions and description of the real property proposed for transfer should be consistent with the description of the affected environment in an NEPA document. The NEPA document may be the most recent site-wide EA or EIS. Alternatively, the NEPA document may be an EA or EIS for the proposed transfer of the real property (see Chapter 13).

There is no need for every detail in the contents of an EBS to coexist in the description of the affected environment in an NEPA document because the EBS and NEPA document serve different purposes and have different emphases. Generally speaking, an EBS is expected to be much more thorough in both scope and depth in describing the conditions (especially with respect to contamination) of a site, as well as historical uses, than a NEPA document. Thus, it is acceptable for an EBS to discuss completely the historical uses of a site but for the NEPA document to limit the discussion to the immediate past use of the site.

What is most important is that the facts about the site conditions in both documents be congruent. For example, if an EBS describes a leaking PCB Transformer on the property, the NEPA document (certainly, one prepared for the transfer of the property) should not say that there are no PCB transformers on the property.

12.8 Checklist

- ☐ Has a determination been made as to the type of EBS to be performed: a base-wide or site-specific EBS?
- ☐ Has the property that is the subject of an EBS been divided into sections to facilitate identification of contaminated and uncontaminated parcels?
- ☐ To the extent practicable, have all the needed environmental data been gathered for each parcel in accordance with the real

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property transfer requirements of Chapters 2-11?

- ☐ Have all the required information sources with respect to reporting of hazardous substance activity (i.e., storage, release, and disposal) and to identifying contamination in each parcel been searched or queried? (Refer to Exhibits 6-3 and 12-1 for the different types of information sources that must be searched.)
- ☐ Have all the data gathered for each parcel been included under the appropriate topics in the EBS for the property? (If a particular topic is not applicable because of the absence of certain features, then make a statement to that effect, e.g., there are no floodplains/wetlands).
- ☐ If the EBS is a base-wide EBS, have the data gaps for specific sites on the property been identified?
- ☐ Has the format in Exhibit 12-2 or a similar format been followed for the EBS?
- ☐ Has the format in Exhibit 12-3 or 12-4, or a similar format, been followed for categorization of the property?
- ☐ Have conclusions addressing the issues (depending on whether the EBS is base-wide or site-specific) discussed in § 12.6 been drawn?

12.9 References

HQDA, 1988. "Environmental Quality," Army Regulation 200-1, Appendix B, Environmental Baseline Survey (EBS) Protocol, (revised November 1, 1990 by policy letter from ENVR-EH, Headquarters, U.S. Department of the Army).

Southdiv, 1994. "Southdiv Guidance on Conducting a Base Wide Environmental Baseline Survey (EBS), a Site-Specific EBS, and Format for EBS Report Preparation," April 7, 1994.